

# SEQUENCE LISTING

<110> Misra, Santosh

<120> PLANT-GENE PROMOTER AND METHODS OF USING THE SAME

<130> 54358

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<141>

<160> 28

<170> PatentIn Ver. 2.1

<210> 1

<211> 6

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<213> Artificial Sequence

<220>

<221> variation

<222> (3)..(4)

<223> N = A, C, G, or T

<220>

<223> Description of Artificial Sequence: PROMOTER  
ELEMENT

<400> 1

canntg

6

<210> 2

<211> 6

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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PROMOTER  
ELEMENT

<400> 2

gcatgc

6

<210> 3

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PROMOTER  
ELEMENT

<400> 3

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29

<210> 4

00841540 "031300

<211> 4  
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 ELEMENT  
  
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4

<210> 5  
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<220>  
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 <222> (3)..(4)  
 <223> N = A, C, G, and T

<220>  
 <223> Description of Artificial Sequence: PROMOTER  
 ELEMENT

<400> 5  
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9

<210> 6  
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 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PROMOTER  
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<400> 6  
 aagattcctc taa

13

<210> 7  
 <211> 10  
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 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PROMOTER  
 ELEMENT

<400> 7  
 gttgttgaga

10

<210> 8  
 <211> 4  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PROMOTER  
 ELEMENT

<400> 8  
 tata

4

<210> 9  
 <211> 4  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: PROMOTER  
 ELEMENT

<400> 9  
 caat

4

<210> 10  
 <211> 2322  
 <212> DNA  
 <213> Pseudotsuga menziesii

<400> 10  
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 aagatccttt gaggttttta tttggaagat gatttgaagt tttcactaaa taattgatat 180  
 gatgataatg acaaagataa tagttactac attgaaacca attttagttt aataatttct 240  
 taaaaaaata taagcccaaa tctaattttg aaatttgaaa gatatatgat tattcaacct 300  
 aaagagataa gataagatcc aactccttcg agtgcttttg gtgacataaa tatagggttt 360  
 atccatttgc gacgatgata tacaatggac gatccagaaa gttccctata aaatgaggat 420  
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 atgcttggca ggggctcagc actgaatgcg ccctgtccca cttcgaagag attccaccgg 540  
 ccgctcttgc cctttcattg ttgttttgga ttctcatggc gggctctgtg acaataacct 600  
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 acatattata tatatagaaa ataagtgttg tgtgatgctg agggatctca cgatgttatt 1440  
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 tactcacctt aaagttatta tgacatgtat actaagttta aagcactatg tcacacgtat 1860  
 ctagttagtt ttactattta ccatcaaaag ttgagtcctg ttggcctggg atcgaggcaa 1920  
 aggcaagaaa gggcagctat actttcatac atttgaaata ttaattcatg gtatcgaaca 1980  
 tatttgaaat attaatcat ggtattgaac atatgttata ctttttgaat aatgctaaca 2040

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atcctcgtag cattacttcc cttacattta gtatgattgc aaatcaaaaa ttatagtatg 2100
attgtaacta aaaaattata ttctatcaat gcatgtagca caagccgcct tcacacctgc 2160
caagaaactt ctgcatgcaa cacatgcctt cttcacacct accaagaaac ttctaggtgt 2220
taatttgctc aagctagtgc tacgtgtaga tttacacaag ctgaaacaat gcagtgtgca 2280
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<210> 11  
 <211> 207  
 <212> DNA  
 <213> Pseudotsuga menziesii

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<400> 11
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aactccttgg gaggaggat gggtgaaacc agctacgact acaacatgaa catgagcttc 120
ggcttcgact acgagatgga aactgtggct gctgagaacg gctgcaaatc cggagcaagc 180
tccaagtact ccaaccgctg caactga 207

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<210> 12  
 <211> 968  
 <212> DNA  
 <213> Pseudotsuga menziesii

<220>  
 <221> promoter  
 <222> (1)..(856)

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<400> 12
attatggagg acataaaaaga cttgctacat attatatata tagaaaataa gtgttgtgtg 60
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cactggttga atgccggcct tcctctttta ttaactatga tatgatattt tagagtaatt 180
tgtgttatat gattatgtgc ttttctatct tattaactat gttattagtc cctgctttga 240
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caaagatata tttttttatt agtcctgcac gcaaattaaa gatatttttt tttttgaatg 360
tagggactgt atgaaagggc ttgtagtggg ttcattagtc ctgtacacaa accaaagata 420
tatatttcac atgtatccta agtcctttact caccttaaag ttattatgac atgtatacta 480
agttttaaagc actatgtcac acgtatctag ttagttttac tatttaccat caaaagttga 540
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gaaatattaa ttcatgggat cgaacatatt tgaaatatta attcatggta ttgaacatat 660
gttatacttt ttgaataatg ctaacaatcc tcgtagcatt acttccctta catttagtat 720
gattgcaaat caaaaattat agtatgattg taactaaaaa attatattct atcaatgcat 780
gtagcacaag ccgccttcac acctgccaaag aaacttctgc atgcaacaca tgccttcttc 840
acacctacca agaaacttct aggtgttaat ttgctcaagc tagttctacg tgtagattta 900
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aggaattc 968

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<210> 13  
 <211> 68  
 <212> PRT  
 <213> Pseudotsuga menziesii

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<400> 13
Met Ser Ser Asp Gly Lys Asp Cys Gly Cys Ala Asp Pro Thr Gln Cys
  1             5             10             15
Asp Lys Lys Gly Asn Ser Leu Gly Val Glu Met Val Glu Thr Ser Tyr
      20             25             30
Asp Tyr Asn Met Asn Met Ser Phe Gly Phe Asp Tyr Glu Met Glu Thr

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35

40

45

Val Ala Ala Glu Asn Gly Cys Lys Ser Gly Ala Ser Ser Lys Tyr Ser  
 50 55 60

Asn Arg Cys Asn  
 65

&lt;210&gt; 14

&lt;211&gt; 9

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: PROMOTER  
 ELEMENT

&lt;400&gt; 14

ttcgtcatc

9

&lt;210&gt; 15

&lt;211&gt; 9

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: PROMOTER  
 ELEMENT

&lt;400&gt; 15

tttatcatc

9

&lt;210&gt; 16

&lt;211&gt; 13

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: PROMOTER  
 ELEMENT

&lt;400&gt; 16

cgaaagagca atg

13

&lt;210&gt; 17

&lt;211&gt; 853

&lt;212&gt; DNA

&lt;213&gt; Pseudotsuga menziesii

&lt;400&gt; 17

cccctagaga gttctgaatg atccagaaag tttagtatga aaatgagcaa tcccacaatt 60  
 cttccaaaaa aaaatgaagg gataagggat ggtttggatg gcaagggatt tcaacattgg 120  
 aagatccttt gaggttttta ttggaagat gatttgaagt tttcactaaa taattgatat 180  
 gatgataatg acaaagataa tagttactac attgaaacca attttagttt aataatttct 240  
 taaaaaataa taagccccaa tctaattttg aaatttgaaa gatatatgat tattcaacct 300  
 aaagagataa gataagatcc aactccttcg agtgcttttg gtgacataaa tatagggttt 360  
 atccatttgc gacgatgata tacaatggac gatccagaaa gttccctata aaatgaggat 420

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ttcacgaaag aatcccattg tacggctcag gatttcgaca ttgaaagatc cattaatgag 480
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ccgtcttgcg cctttcattg ttgttttgga ttctcatggc gggctctgtg acaataacctg 600
cagcttcggc catctataat tgccacggaa ggctgctctt cttctcaaca atcaaagcaa 660
aagcaaagct tattctgtgt attgcaattt ccaacgttga aagatccatt attgagatgc 720
cctgtcccac ttcgatgaga ttccaccacg tgtcttgcg ctttcattgt tgtttggatt 780
ctaattggcg gtctgtgggc cataccttca gcttcggcca cttataaatg ccacggaagg 840
ctgctcttct tct 853

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<210> 18
<211> 6
<212> DNA
<213> Artificial Sequence

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```

<220>
<223> Description of Artificial Sequence: PROMOTER
ELEMENT

```

```

<400> 18
aacgtt 6

```

```

<210> 19
<211> 6
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: PROMOTER
ELEMENT

```

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<400> 19
cacgtg 6

```

```

<210> 20
<211> 8
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: PROMOTER
ELEMENT

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<220>
<221> variation
<222> (1)..(8)
<223> W = A OR T

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<400> 20
awttcaaa 8

```

```

<210> 21
<211> 7
<212> DNA
<213> Artificial Sequence

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<220>
<221> variation

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008780" 0454960

<222> (1)..(7)  
<223> n = a, t, c, or g

<220>  
<221> variation  
<222> (1)..(7)  
<223> r = g or a

<220>  
<223> Description of Artificial Sequence: PROMOTER  
ELEMENT

<400> 21  
tgcrnc

7

<210> 22  
<211> 944  
<212> DNA  
<213> Pseudotsuga menziesii

<400> 22  
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aagatccttt gaggttttta tttggaagat gatttgaagt tttcactaaa taattgatat 180  
gatgataatg acaaagataa tagttactac attgaaacca attttagttt aataatttct 240  
taaaaaaata taagcccca tctaattttg aaatttgaaa gatatatgat tattcaacct 300  
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atgcttgga cgggctcagc actgaatgcg cctgtccca cttcgaagag attccaccgg 540  
ccgtcttgccg cctttcattg ttgttttgga ttctcatggc gggtctgttg acaataacctg 600  
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aagcaaagct tattctgtgt attgcaattt ccaacgttga aagatccatt attgagatgc 720  
cctgtccac ttcgatgaga ttccaccacg tgtcttgccg ctttcattgt tgtttgatt 780  
ctaattggcg gtctgtgggc cataccttca gcttcggcca cttataaatg ccacggaagg 840  
ctgctcttct tctcaacaat caaagcaaaa tcagagagaa ttctgtgtat tgcggtttcc 900  
cgacgtttgt atcagtttct tgtgtttgtt aacgatctgc aaac 944

<210> 23  
<211> 765  
<212> DNA  
<213> Pseudotsuga menziesii

<400> 23  
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taaagagata agataagatc caactccttc gagtgctttt ggtgacataa atatagggtt 180  
tatccatttg cgacgatgat atacaatgga cgatccagaa agttccctat aaaatgagga 240  
tttcacgaaa gaatcccat gtacggctca ggatttcgac attgaaagat ccattaatga 300  
gatgcttggc aggggctcag cactgaatgc gccctgtccc acttcgaaga gattccaccg 360  
gccgtcttgc gcctttcatt gttgttttg attctcatgg cgggtctgtg gacaatacct 420  
gcagcttcgg ccatctataa ttgccacgga aggctgctct tcttctcaac aatcaaagca 480  
aaagcaaagc ttattctgtg tattgcaatt tocaacgttg aaagatccat tattgagatg 540  
cctgtccca cttcgatgag attccaccac gtgtcttgcg cctttcattg ttgtttggat 600  
tctaattggc ggtctgtggg ccataccttc agcttcggcc acttataaat gccacggaag 660  
gctgctcttc ttctcaacaa tcaaagcaaa atcagagaga attctgtgta ttgcgggttc 720  
ccgacgtttg tatcagtttc ttgtgtttgt taacgatctg caaac 765

<210> 24  
 <211> 547  
 <212> DNA  
 <213> Pseudotsuga menziesii

<400> 24  
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 ccacttcgaa gagattccac cggcgtctt gcgcctttca ttgttggttt ggattctcat 180  
 ggcgggtctg tggacaatac ctgcagcttc ggccatctat aattgccacg gaaggctgct 240  
 cttcttctca acaatcaaag caaaagcaaa gcttattctg tgtattgcaa tttccaacgt 300  
 tgaaagatcc attattgaga tgccctgtcc cacttcgatg agattccacc acgtgtcttg 360  
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 ccacttataa atgccacgga aggtgctct tcttctcaac aatcaaagca aaatcagaga 480  
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 tgcaaac 547

<210> 25  
 <211> 278  
 <212> DNA  
 <213> Pseudotsuga menziesii

<400> 25  
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 gcgggtctgt gggccatacc ttcagcttcg gccacttata aatgccacgg aaggctgctc 180  
 ttcttctcaa caatcaaagc aaaatcagag agaattctgt gtattgcggt tccccgacgt 240  
 ttgtatcagt ttcttggtgt tgtaaacgat ctgcaaac 278

<210> 26  
 <211> 150  
 <212> DNA  
 <213> Pseudotsuga menziesii

<400> 26  
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 tgctcttctt ctcaacaatc aaagcaaaag 150

<210> 27  
 <211> 150  
 <212> DNA  
 <213> Pseudotsuga menziesii

<400> 27  
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 gctcttcttc tcaacaatca aagcaaaatc 150

<210> 28  
 <211> 19  
 <212> DNA  
 <213> Pseudotsuga menziesii

<400> 28  
 attgcaattt ccaacgttg 19

09641540-081300